1. A method of performing beating heart surgery, comprising the step of maintaining at least partial blood flow through a protected blood flow path within a portion of at least one of the vena cava, the right atrium, the right ventricle and pulmonary artery of a beating heart.

2. The method of claim 1 and further, wherein the step of maintaining at least partial blood flow involves the step of pumping blood through said protected blood flow path by the action of the beating heart.

3. The method of claim 2 and further, wherein said protected blood flow path is established by positioning a conduit within at least one of the vena cava, the right atrium, the right ventricle, and the pulmonary artery.

4. The method of claim 3 and further, wherein said conduit is provided as a stent deployed within at least one of the vena cava and the pulmonary artery.

5. The method of claim 3 and further, wherein said conduit is provided extending through the pulmonary valve and including a fluid inlet aperture disposed within the right ventricle.

6. The method of claim 5 and further, wherein said conduit is

introduced through the wall of the right ventricle for passage through the pulmonary valve.

7. The method of claim 5 and further, wherein said conduit is provided extending through the tricuspid valve and including a fluid inlet aperture disposed within the right atrium.

8. The method of claim 7 and further, wherein said conduit is introduced into the right atrium through at least one of the inferior vena cava and the wall of the right atrium for passage through the tricuspid valve.

9. The method of claim 7 and further, wherein said conduit is introduced through the vena cava for passage into the right atrium.

10. The method of claim 5 and further, wherein said conduit is provided with a valve for preventing fluid back flow from the pulmonary artery into the right ventricle.

11. The method of claim 7 and further, wherein said conduit is provided with a valve for preventing fluid back flow from the right ventricle into the right atrium.

12. The method of claim 6 and further, wherein said conduit is provided with a blocking member for preventing fluid flow through the wall of the right ventricle.

13. The method of claim 8 and further, wherein said conduit is provided with a blocking member for preventing fluid flow through the wall of the right atrium.

14. The method of claim 2 and further, wherein said conduit is positioned at least partially within the right atrium and extending through the tricuspid valve to pre-load the right ventricle.

15. The method of claim 14 and further, wherein said conduit is provided with a valve for preventing fluid back flow from the right ventricle into the right atrium.

16. The method of claim 14 and further, wherein said conduit is provided having at least one fluid inlet aperture disposed within the right atrium.

17. The method of claim 14 and further, wherein said conduit is maintained in position through the use of a handle member.

18. The method of claim 3 and further, wherein said conduit is maintained in position through the use of a handle member.

19. The method of claim 3 and further, wherein said conduit is provided with an inflatable balloon member to facilitate the placement of said conduit within the pulmonary artery.

20. The method of claim 1 and further, including the sub-steps of:

positioning a conduit through the pulmonary valve and at least partially within the pulmonary artery to establish said protected blood flow path; and

pumping blood through said protected blood flow path by the action of a pump communicatively coupled to said conduit.

21. The method of claim 21 and further, wherein said pump transports blood from at least one of the vena cava, the right atrium, and the right ventricle through the pulmonary valve and into the pulmonary artery.

22. The method of claim 21 and further, wherein said pump is an axial pump disposed within said conduit for transporting blood from at least one of the vena cava, the right atrium, and the right ventricle into the pulmonary artery.

23. The method of claim 21 and further, wherein said conduit comprises an inflow cannula for transporting fluid into said pump and an outflow cannula for transporting fluid away from said pump.

24. The method of claim 23 and further, wherein said outflow cannula is positioned generally coaxially within said inflow cannula.

25. The method of claim 24 and further, wherein said inflow cannula is introduced into the right atrium through an aperture formed through one of the wall of the right atrium and the atrial appendage.

26. The method of claim 25 and further, wherein said inflow cannula includes a curved distal portion extending, in use, through the tricuspid valve and into at least one of the right ventricle and the pulmonary artery for directing the outflow cannula into the pulmonary artery.

27. The method of claim 26 and further, wherein said inflow cannula includes at least one fluid inlet aperture disposed within said right atrium.

28. The method of claim 27 and further, wherein said inflow cannula includes a basket region having said at least one fluid inlet aperture formed therein.

29. The method of claim 26 and further, wherein an exterior surface of said inflow cannula is provided within indicia for facilitating the placement of said curved distal portion within said right ventricle.

30. The method of claim 25 and further, wherein said inflow cannula is provided with a distal opening disposed within at least one of the vena cava and the right atrium for withdrawing blood for delivery to said pump.

31. The method of claim 24 and further, wherein said inflow cannula extends intravascularly into at least one of the right atrium and the right ventricle to withdraw blood therefrom for delivery to said pump.

32. The method of claim 31 and further, wherein said inflow cannula is provided having at least one fluid inlet aperture formed therein to allow inflow of blood to said pump.

33. The method of claim 32 and further, wherein said inflow cannula is provided with a curved distal portion extending into at least one of the right ventricle and the pulmonary artery to facilitate the placement of the outflow cannula into the pulmonary artery.

34. The method of claim 33 and further, wherein said outflow cannula is provided with a curved distal portion to facilitate the placement of the outflow cannula through the pulmonary valve and into the pulmonary artery.

35. The method of claim 32 and further, wherein said inflow cannula is provided having a distal opening disposed within at least one of the right atrium and the right ventricle, and wherein said outflow cannula extends through the pulmonary valve and into the pulmonary artery.

36. The method of claim 23 and further, wherein said outflow cannula and said inflow cannula are slideably coupled to one another in a generally side-by-side fashion.

37. The method of claim 36 and further, wherein said outflow cannula and said inflow cannula are introduced intravascularly such that said outflow cannula extends into the pulmonary artery and such that said inflow cannula extends into at least one of the vena cava, the right atrium, and the right ventricle.

38. The method of claim 37 and further, wherein said inflow cannula is provided with a plurality of openings to facilitate the inflow of blood into said pump.

39. The method of claim 38 and further, wherein said outflow cannula is provided with a plurality of openings to facilitate the outflow of blood from said pump.

40. A method of performing beating heart surgery, comprising the step of maintaining at least partial blood flow through a protected blood flow path within a portion of at least one of the left atrium, the left ventricle and aorta of a beating heart.

41. The method of claim 40 and further, wherein the step of maintaining at least partial blood flow involves the step of pumping blood through said protected blood flow path by the action of the beating heart.

42. The method of claim 41 and further, wherein said protected blood flow path is established by positioning a conduit at least partially within the aorta.

43. The method of claim 42 and further, wherein said conduit is provided extending through the aortic valve with a fluid inlet disposed in the left ventricle.

44. The method of claim 43 and further, wherein said conduit is provided extending through the bicuspid valve into the left atrium with a fluid inlet

disposed in the left atrium.

45. The method of claim 44 and further, wherein said conduit is provided with at least one valve for preventing the back flow of blood through at least one of the aortic valve and the bicuspid valve.

46. The method of claim 45 and further, wherein said conduit is introduced through the wall of the left atrium for passage into the left ventricle.

47. The method of claim 46 and further, wherein said conduit is provided with a blocking member disposed therein for preventing the flow of blood through the wall of the left atrium.

48. The method of claim 40 and further, including the sub-steps of:

positioning a conduit through at least one of the aortic valve and the bicuspid valve to establish said protected blood flow path; and

pumping blood through said protected blood flow path by the action of a pump communicatively coupled to said conduit.

49. The method of claim 48 and further, wherein said pump transports blood from at least one of the left atrium and the left ventricle through the aortic valve and into the aorta.

50. The method of claim 49 and further, wherein said pump is an axial pump disposed within said conduit for transporting blood from at least one of the left atrium and left ventricle into the aorta.

51. The method of claim 49 and further, wherein said conduit comprises an inflow cannula for transporting fluid into said pump and an outflow cannula for transporting fluid away from said pump.

52. The method of claim 51 and further, wherein said outflow cannula is positioned generally coaxially within said inflow cannula.

53. The method of claim 52 and further, wherein said inflow cannula is introduced into the left atrium through an aperture formed in the wall of the left atrium.

54. The method of claim 51 and further, wherein said inflow cannula is positioned generally coaxially within said outflow cannula.

55. The method of claim 54 and further, wherein said outflow cannula is introduced through the wall of the aorta.